In the Claims:

1. (original) Cross spring element for the connection of two relatively rotatable bearing elements (1, 2), that comprises at least two leaf spring elements (3, 4, 5, 6) which cross each other transversely to the rotation axis (7) and which connect both bearing elements (1, 2) with one another, characterized in that the mutually crossing leaf spring elements (3, 4; 5, 6) of one radial direction (8) are arranged at least pair-wise, whereby the ends of each leaf spring pair (3, 4; 5, 6) on one side are respectively secured to different bearing elements (1, 2), and this alternately with the opposite side.

2. (original) Cross spring element according to claim 1, characterized in that the bearing elements (1, 2) are embodied ring-shaped and are connected with four pair-wise crossing leaf springs (3, 4; 5, 6), whereby the leaf spring pairs (3, 4; 5, 6) cross themselves orthogonally.

Claims 3 to 7 (canceled).

8. (new) Cross spring element according to claim 1, characterized in that the leaf springs (3, 4, 5, 6) are arranged parallel next to one another in the direction of

the rotation axis (7) and cross themselves on the rotation axis (7).

9. (new) Cross spring element according to claim 2, characterized in that the ring-shaped bearing elements (1, 2) comprise an outwardly directed planar connection rim (11) for the securing of a rotation element, and an inwardly stepped inner part (12) provided with projections and recesses (13), which engage into the oppositely lying bearing element (1, 2) and have at least axial surfaces (9) for the securing of the leaf spring ends.

10. (new) Cross spring element according to claim 2, characterized in that the ring-shaped bearing elements (1, 2) are axially spaced from one another by recesses (13) or slits, and permit at least a twisting or rotation angle of 5° up to 45°, and are connected through flat thin leaf springs (3, 4, 5, 6), whereby the leaf springs (3, 4, 5, 6) are flexurally soft in the rotation direction and flexurally hard in the tension direction.

11. (new) Cross spring element according to claim 2, characterized in that the ring-shaped bearing elements (1, 2) comprise securing means, with the aid of which this is rotatably supported between a drive unit and a force transducer, and serves for the friction-free transmission of the drive moment that is to be measured.

12. (new) Cross spring element according to claim 11, characterized in that this is arranged between a drive shaft of an impeller wheel and a force transducer of a bulk material mass flow measuring apparatus according to the Coriolis principle.

[REMARKS FOLLOW ON NEXT PAGE]